

Vermont Mental Health Performance Indicator Project
Agency of Human Services, Department of Health, Division of Mental Health
108 Cherry Street, Burlington, Vermont 05402

TO: Vermont Mental Health Performance Indicator Project
Advisory Group and Interested Parties

FROM: John Pandiani and Joan Mongeon

DATE: July 7, 2006

RE: Viral Hepatitis Infection Among MH and SA Service Recipients

This week's brief report continues our series on the health status of mental health (MH) and substance abuse (SA) service recipients in Vermont by examining the prevalence of viral hepatitis diagnoses among adults who received MH or SA services from designated community agencies during calendar year (CY) 2004.

Three data sets were used in this analysis. The first data set, extracted from the Monthly Service Report (MSR) database submitted to the Division of Mental Health by designated agencies, provided basic demographic information for 11,577 adults who were assigned to adult MH programs, including Community Rehabilitation and Treatment (CRT) programs for adults with serious mental illness and Adult Outpatient (AOP) programs for adults who do not have a serious mental illness but are experiencing emotional, behavioral, or adjustment problems severe enough to warrant professional attention. The second data set, extracted from the same MSR database, provided basic demographic information for 5,359 adults who were assigned to SA programs during the same time period. The third data set, extracted from the Vermont Department of Health Hepatitis Registry, provided basic demographic information for the 5,542 individuals who received a diagnosis of Hepatitis B or C in Vermont during 1994 through 2005. Because these data sets do not share unique person identifiers, Probabilistic Population Estimation was used to determine the unduplicated number of individuals from each treatment data set who were also represented in the hepatitis data set. All statistical estimates in the text are accompanied by a "±" to indicate statistical uncertainty, and the actual 95% confidence intervals are provided in the tables.

As you will see, SA service recipients were substantially more likely than MH service recipients to have had a hepatitis diagnosis (9.3%± vs. 3.7%±, respectively), and both groups of service recipients were substantially more likely to have had a hepatitis diagnosis than members of the general population of Vermont (1.1%±).

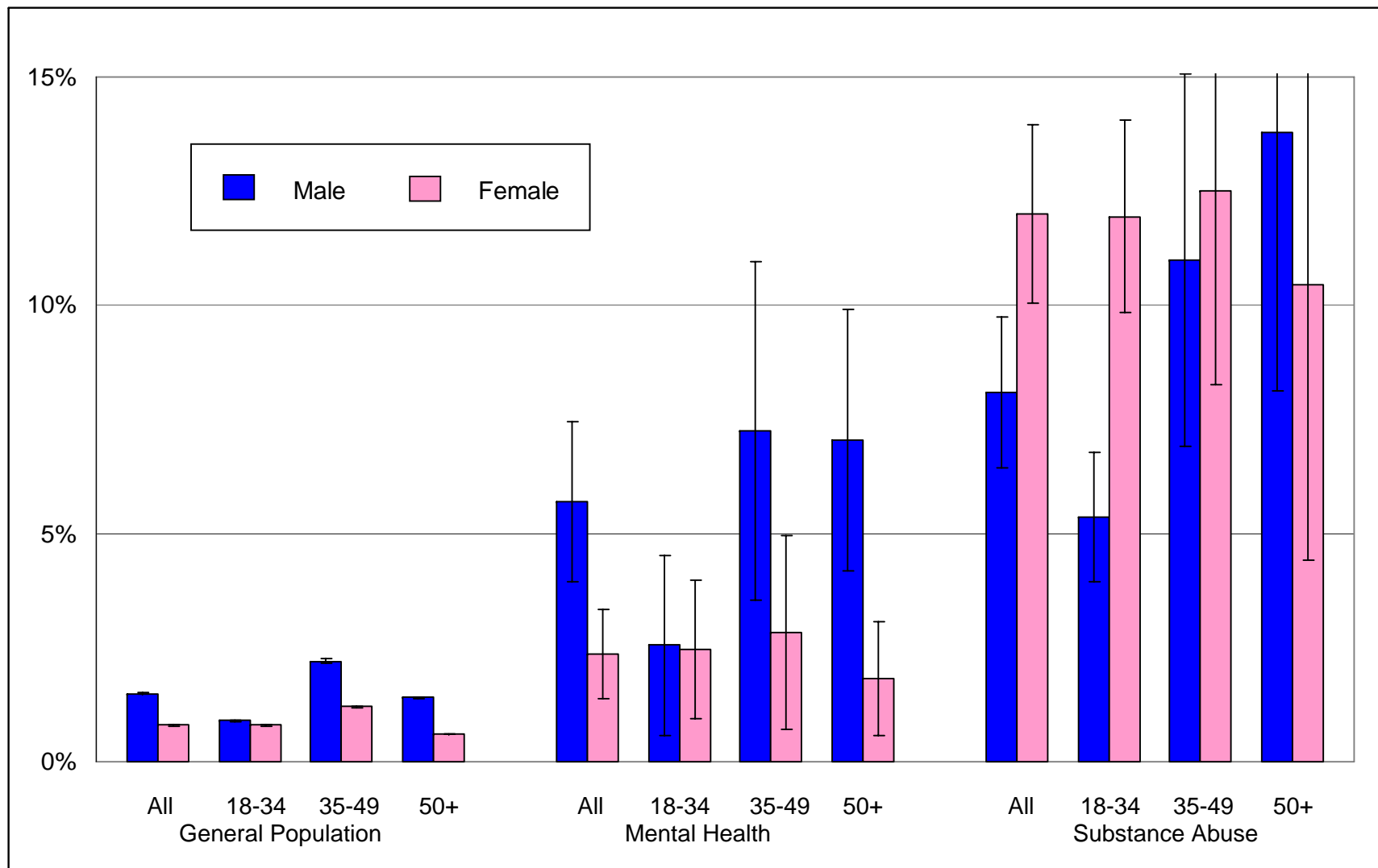
In the general population, men were significantly more likely than women to have had a hepatitis diagnosis (1.5%± vs. 0.8%±). Among MH service recipients, as in the general population, men were significantly more likely than women to have a hepatitis diagnosis (5.7%± vs. 2.4%±). Among SA service recipients, however, men were significantly less likely than women to have a hepatitis diagnosis (8.1%± vs. 12.0%±, respectively).

Interestingly, the gender related difference in hepatitis rates among MH service recipients is concentrated in the older age groups. There is no difference between male and female MH service recipients in the 18-34 age group, but in the 35-49 age group men were more than twice as likely as women to have had a hepatitis diagnosis (7.2%± vs. 2.8%±) and in the 50+ age group, men were almost 4 times as likely to have had a hepatitis diagnosis (7.1%± vs. 1.8%±).

The gender related difference in hepatitis rates among SA service recipients, however, is concentrated in the youngest age group. Differences between male and female SA service recipients in the 35 to 49 and 50+ age groups are not statistically significant, while male SA recipients in the 18-34 age group were less than half as likely as female service recipients in the same age group to have had a hepatitis diagnosis (5.4%± vs. 11.9%±).

We look forward to your comments and your interpretation of these findings, and your suggestions for further analyses regarding the prevalence of hepatitis diagnoses in human services caseloads in Vermont. As always you can contact us at pip@vdh.state.vt.us or 802-863-7249.

Viral Hepatitis Diagnosis Rates by Gender
For General Population and Mental Health and Substance Abuse Service Recipients
Vermont CY2004



Analysis is based on anonymous extracts from monthly service reports (MSR) for CY2004 provided by community mental health centers and extracts from the Vermont Department of Health Hepatitis Registry for 1994 – 2005. Because these data sets do not share unique person identifiers, Probabilistic Population Estimation was used to determine the unduplicated number of individuals represented in the data sets (with 95% confidence intervals).

**Caseload Overlap Between Anonymous Extracts from
Vermont's MSR CRT & AOP & SA Caseload CY2004
and Hepatitis B & C Registry CY1994 - CY2005**

		<u>General Population</u>		<u>Mental Health Service Recipients</u>			<u>Substance Abuse Service Recipients</u>		
		<u>With Hepatitis Diagnosis</u>		<u>Total Caseload</u>	<u>With Hepatitis Diagnosis</u>		<u>Total Caseload</u>	<u>With Hepatitis Diagnosis</u>	
					<u>Number</u>	<u>Percent</u>		<u>Number</u>	<u>Percent</u>
Total		1.1%	± 0.0%	11,577 ± 86	433 ± 107	3.7% ± 0.9%	5,359 ± 54	499 ± 69	9.3% ± 1.3%
Gender	Male	1.5%	± 0.0%	4,756 ± 50	272 ± 84	5.7% ± 1.8%	3,698 ± 50	300 ± 61	8.1% ± 1.7%
	Female	0.8%	± 0.0%	6,821 ± 70	161 ± 66	2.4% ± 1.0%	1,662 ± 22	199 ± 32	12.0% ± 1.9%
18-34	Total	0.8%	± 0.0%	3,502 ± 48	87 ± 42	2.5% ± 1.2%	3,055 ± 47	226 ± 36	7.4% ± 1.2%
	Male	0.9%	± 0.0%	1,493 ± 28	38 ± 30	2.5% ± 2.0%	2,106 ± 43	113 ± 30	5.4% ± 1.4%
	Female	0.8%	± 0.0%	2,010 ± 39	49 ± 30	2.5% ± 1.5%	949 ± 19	113 ± 20	11.9% ± 2.1%
35-49	Total	1.7%	± 0.0%	2,010 ± 39	49 ± 30	2.5% ± 1.5%	1,729 ± 26	199 ± 53	11.5% ± 3.1%
	Male	2.2%	± 0.1%	1,749 ± 35	127 ± 65	7.2% ± 3.7%	1,171 ± 23	129 ± 48	11.0% ± 4.1%
	Female	1.2%	± 0.0%	2,387 ± 49	68 ± 51	2.8% ± 2.1%	557 ± 11	70 ± 24	12.5% ± 4.2%
50+	Total	0.9%	± 0.0%	3,938 ± 40	151 ± 53	3.8% ± 1.3%	576 ± 10	74 ± 26	12.9% ± 4.4%
	Male	1.4%	± 0.0%	1,514 ± 22	107 ± 43	7.1% ± 2.9%	420 ± 9	58 ± 24	13.8% ± 5.7%
	Female	0.6%	± 0.0%	2,424 ± 33	44 ± 30	1.8% ± 1.3%	156 ± 4	16 ± 9	10.5% ± 6.0%

Analysis is based on anonymous extracts from monthly service reports (MSR) for CY2004 provided by community mental health centers and extracts from the Vermont Department of Health Hepatitis Registry for 1994 – 2005. Because these data sets do not share unique person identifiers, Probabilistic Population Estimation was used to determine the unduplicated number of individuals represented in the data sets (with 95% confidence intervals).